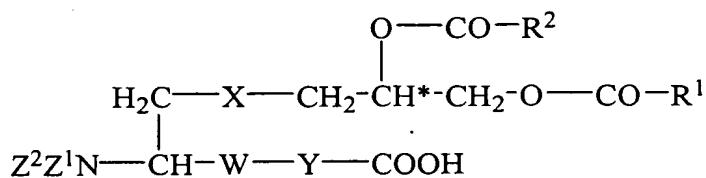


## CLAIMS

### What is Claimed is:

5 1. Application of a lipopeptide or lipoprotein with the following general structure:



10 in which  
 $\text{R}^1$  and  $\text{R}^2$ , which can be the same or different, stand for C<sub>7-25</sub>-alkyl, C<sub>7-25</sub>-alkenyl or C<sub>7-25</sub>-alkinyl,

X is S, O or CH<sub>2</sub>,

15 Z<sup>1</sup> and Z<sup>2</sup>, which can be the same or different, stand for H or methyl,  
W stands for CO or S(O)<sub>n</sub> (where n = 1 or 2) and

Y stands for a physiologically compatible amino acid sequence consisting of 1 to 25 amino acid residues and the asymmetric carbon atom marked with \* has the absolute configuration S when X = S (sulfur), for the preparation of a  
20 pharmaceutical preparation for treatment of wounds in animals or humans.

2. Application according to Claim 1, characterized by the fact that  
Y stands for a physiologically compatible amino acid sequence consisting of 1 to 25  
amino acids.

3. Application according to Claim 1, characterized by the fact that  
25 Y stands for an amino acid sequence which is selected from the following group:

(i) amino acid sequence, which does not have an adverse  
influence on the water solubility of the lipopeptide  
or lipoprotein.

- (ii) GQTNT (SEQ ID NO:1)
- (iii) SKKKK (SEQ ID NO:2)
- (iv) GNNDESNISFKEK (SEQ ID NO:3)
- (v) GQTDNNSSQSQQPGSGTTNT (SEQ ID NO:4)

5 where, in amino acid sequences (ii), (iii), (iv) and (v), individual amino acids may be absent or replaced.

4. Application according to one of the previous Claims, where the C<sub>7</sub>-25-alkyl, C<sub>7</sub>-25-alkenyl or C<sub>7</sub>-25-alkinyl is a C<sub>15</sub>-alkyl, C<sub>15</sub>-alkenyl or C<sub>15</sub>-alkinyl.

10 5. Application according to one of the previous Claims, where the double bond(s) in the C<sub>7</sub>-25-alkenyl group has(have) the cis-configuration.

15 6. Application of a physiologically compatible lipopeptide or lipoprotein which carries at the N-terminal a dihydroxypropyl cysteine group with two, optionally long-chain, fatty acids bonded via ester bonds, which can be the same or different, for the preparation of a pharmaceutical preparation for the treatment of animal and human wounds.

7. Application of a lipopeptide or lipoprotein obtainable from a mycoplasma clone for the treatment of wounds in animals or humans.

8. Application according to Claim 7, characterized by the fact that 20 the lipopeptide or lipoprotein can be obtained from a Mycoplasma fermentans clone.

9. Application according to one of the previous Claims, where the lipopeptide or lipoprotein is water-soluble or amphoteric.

10. Application according to one of the previous Claims of a lipopeptide or lipoprotein selected from the group

25 (i) S-[2,3-bispalmitoyloxy-(2RS)-propyl]cysteinyl-GQTNT (SEQ ID NO:5)

(ii) S-[2,3-bispalmitoyloxy-(2RS)-propyl]cysteinyl-SKKKK (SEQ ID NO:6)

(iii) S-[2,3-bispalmitoyloxy-(2RS)-propyl]cysteinyl-

GNNDESNISFKEK (SEQ ID NO:7)

(iv) S-[2,3-bispalmitoyloxy-(2S)-propyl]cysteinyl-

GNNDESNISFKEK (SEQ ID NO:8)

(v) S-[2,3-bispalmitoyloxypropyl]cysteinyl-

5 GQTDNNSSQSQQPGSGTTNT (SEQ ID NO:9)

11. Application according to one of the previous Claims, where the  
lipopeptide or lipoprotein can be in the form of a solution for epicutaneous  
application, an injection solution, a salve, a lotion, an aqueous suspension, a plaster  
impregnated or coated with it, encapsulated in liposomes or coupled to biodegradable  
10 carrier polymers.

12. Application according to one of the previous Claims, with the  
wounds being wounds after injury or surgical intervention, chronically infected  
wounds, burn wounds, chronic ulcers or Ulcus venosum or wounds of patients who  
are corpulent or diabetic or are subjected to radiation or chemotherapy.

15